



## Small Business Case Study

Laptops with Intel® Centrino® mobile technology, and a custom-built server with Dual-Core Intel® Xeon® processor technology and HT technology  
Number of employees: 1-25



# Lewis Media Inc. designs success with Intel

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### Case Summary

As a small business creating user-centric Web projects for clients in the not-for-profit and technology sectors, Lewis Media was outgrowing the desktop computers they were using as servers. They needed more power and faster speed to quickly render pages for their customers. In addition, the company needed mobility solutions to allow flexibility for its president, and to allow remote workers to access files while developing new product lines. Intel processors were the right choice to meet the power and mobility needs of the growing business.

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### Challenge

Lewis Media, a small business based in Kitchener Waterloo, specializes in providing Web-development services to support not-for-profit and technology companies. The company was founded in 2001 by four partners who originally met while developing code for an open source discussion board project called Simple Machines Forum. Joseph Fung, who would become the company president, was sick in hospital at the time, and with only a computer and Internet connection available, he spent a lot of time contributing to the forum's source code. This is when he connected with three other developers with whom he formed Lewis Media.

"We realized we had the same passion and decided to launch Lewis Media as a part-time business," recalls Fung, who was then in university. By 2003, the part-time business had grown into a full-time enterprise. The company has doubled in revenue and staff every year since.

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**“We needed something that could really chew through the processes running on the server. It has been fantastic and customers have commented on the increased speed and performance.”**

While building a business based on the philosophy that high-tech doesn't have to be high-priced, Lewis Media has found a niche in providing smaller and growing businesses with advanced Web services that were previously available only to larger corporations. They also provide access to two off-the-shelf products: Web Admin\*, which allows companies to easily update their Web sites without the ongoing cost of a Webmaster; and Simple Machines Forum\*, the open source discussion board software solution.

When the business started, the company was using desktop computers as servers to host their development and Internet services. With the growth of their applications and their online help service, they needed more power and faster response times. Upgrades were needed, and speed was essential.

The company also had a number of remote workers who were sharing product development through the company's secure VPN connection. The stability and throughput of files was important to developers working outside of the office to maintain high levels of productivity.

“Our server load was sitting very high. We had to minimize those loads to increase the performance of our services,” recalls Fung.

#### **Solutions**

After reviewing the specifications of all their different server options, Fung chose to upgrade

their main web server to a custom-built server with Dual-Core Intel® Xeon® processor technology and Intel® Hyper-Threading technology (HT technology). Fung moved their main Web site and primary Web services (such as help desk services) to the new server which could better handle the peak demands.

Before upgrading, Lewis Media's [simplemachines.org](http://simplemachines.org) page, which provides support for Simple Machines Forum, could take up to 4.5 seconds to render. With the new server with Dual-Core Intel® Xeon® technology, that same page took only 0.013 seconds. With hundreds of people hitting the page at a given time, speed, stability and rendering were important considerations for Lewis Media.

“We needed something that could really chew through the processes running on the server,” says Fung. “It has been fantastic and customers have commented on the increased speed and performance.”

“People don't want to wait for a page to build. With increased memory on the server, the database can access more memory and run faster. With HT technology, the server can run multiple processes at the same time, which makes things even faster.”

#### **Key Advantages**

Managing the loads being placed on the server by its users and increasing speed were critically important for Lewis Media. With a growing client base,



and development taking place on some new products set for release this year, Fung needed certainty that the Lewis Media infrastructure could handle it.

In addition to upgrading their server environment, Fung was also adding new computers to support new staff. With the development of new software solutions in the works, as well as the need for staff to support its growing client base, the company chose workstations with Intel® Pentium® 3 technology. In addition, Fung needed to provide mobility solutions for himself and other key staff who were working with clients, and often remote, from the office.

### **Mobility Essential For *On The Go* President**

In any given week, Fung is out of the office for two to three days. Without a mobility solution, Fung would be out of touch with both clients and staff.

If not for his laptop with Intel® Centrino® mobile technology, Fung says: "I wouldn't be able to do any work." Fung chose Intel® Centrino® technology because of the extended battery life and integrated wireless capabilities. "I don't always have access to a power outlet and need to conserve battery life while I work on processor intensive design programs."

Fung confesses that he challenges his laptop with numerous design programs and switches back and forth between programs regularly. His laptop has performed well in this environment and has allowed him to remain productive when travelling. "If I get to Toronto an hour early for a meeting, I need to be able to and have enough battery life to make good use of that time. I can't count the number of times my wireless connectivity has been useful," he says, recalling a time when he was sitting in the airport in Korea, and hammering out a contract with a North American client via the airport's free wireless access.

### **Business Owner & Student Needs Flexibility**

In addition to being a full-time company president, Fung has been working on his degree in computer engineering at the University of Waterloo. He recently completed a semester at university while still running the business. During that semester, Fung was named the 2005 CIBC Student Entrepreneur of the Year, an award recognizing the development and operation of the most innovative and entrepreneurial business by a Canadian post-secondary student. He attributes the award to the hard work and solid business growth made possible by the team at Lewis Media. While many student-run businesses are part-time enterprises, Lewis Media is a full-time business already showing positive growth.

Fung admits that taking courses to complete his computer engineering degree while running the business was taxing. Fung says that wireless connectivity and his notebook with Intel® Centrino® mobile technology, allowed him to do both. In the future, Fung plans to take time off from the business to complete his degree.

### **Intel® Xeon® Is On The Block**

OnMyBlock.ca Ltd. is a subsidiary of Lewis Media that provides neighbourhoods across Canada with an affordable and simple way to keep their residents up to date with local events and services.

Since OnMyBlock.ca\* was launched in 2004, 84 communities across Canada have signed up for this interactive neighborhood program. Fung admits they underestimated the popularity of the sites. They thought they would have about 700 hits per site per month. The reality has been more than 10,000 page views per month, which required Lewis Media to upgrade the hosting server to a new server with Intel® Xeon® processor technology.

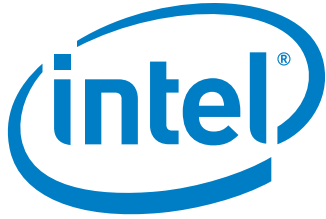
Fung says that moving the Web site to their new server has made it easier to maintain. Under the old configuration, they would have had to add another computer to handle the load. Now they can maintain one server and have the ready capacity to handle further growth.

### **Putting Users First**

Lewis Media focuses on building Web sites that are easy to use, as well as easy for their clients to update. Building on an open source environment that allows inter-connectivity with a range of software solutions, Lewis Media overlays user-centric design to make it easy for clients to operate and link into existing customer databases or help desks.

Clients are seeing the benefits of Lewis Media's user-centric design approach, from the user interface of a research project for Canada's Department of National Defense aircraft technicians' learning management system, to an online collaborative alumni forum for Shad International, which runs a program to foster entrepreneurship, creativity and career development for advanced students across Canada.

As Lewis Media builds new software solutions and develops sites for its clients, it focuses on positive user experience and interfaces that are intuitive. WebAdmin\* software was developed on Lewis Media's desktop computers with Intel® Pentium® 3 technology. The migration to a server with Intel® Xeon® processor technology has improved the company's efficiency in developing and sharing the source code among its developers.



### Future Uses

For Fung, the future is about continuing to grow his business. With new versions of the company's core products set for release this year, Fung is estimating growth to continue at its current rate of doubling in size every year for the next four years. Plans are underway to provide customers with hosted services, which could require further upgrades to Lewis Media's server. Fung is currently evaluating Intel® Itanium® 2 processor technology to meet the demands of a hosted solution.

In addition, the company is expanding its development efforts in the coming year and will need to add up to three new internal servers at the office to handle the increased processing load.

Find out more about a business solution that is right for your company by contacting your Intel representative, or visit the Intel Business Enterprise Web site at [intel.ca/business](http://intel.ca/business) or its industry solutions specific sites at [intel.ca/business/bss/industry](http://intel.ca/business/bss/industry).



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